THE
Southern Medical Record.

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VOL. X. ATLANTA, GA., JULY 20, 1880. No. 7.

ORIGINAL AND SELECTED ARTICLES.

RHUS AROMATICA IN ENURESIS.

BY J. L. LALLERSTEDT, M.D., OF GEORGIA.

We who live in the country are frequently called upon to treat cases of enuresis in children, and, heretofore, the treatment has been very unsatisfactory both to the medical man and patient. But I am of the impression that we have now a remedy for this troublesome affection, and that is *rhus aromatica* (sweet sumac). I have only had three cases thus far to try it on.

During the month of December, 1878, a negro boy about 13 years of age came to see me and said as long as he would sit up he was not troubled about passing his urine, but as soon as he lay down he would "wet all over everything." I gave him rhus aromatica, twenty drops every three hours in a little water, last dose on going to bed. After taking it for one day he was able to lay down and sleep without the usual flow. After it gave out he was so much better, he thought he was well, but in a few days the same state of things returned. He came back and I gave him same quantity of the rhus with orders when it was out to come and get more, which he did. The third half ounce made a complete cure.

About that time I was consulted by a gentleman with regard to his son who had to get up from eight to ten times per night, and he was

all bloated up and unable to do anything; could scarcely get about home for want of breath.

I gave him :

Rhus aromatica	℥ v.
Simple syrup	℥ iij.
Water to make	℥ v.

Dose, one teaspoonful every three hours, and last dose on going to bed.

He only had to take some three or four bottles of above when he was able to do about as much as any one of his age on the farm. He is now in good health.

The third case was that of a lady who complained of passing from one to two gallons of urine during twenty-four hours, and most of it at night; yet she appeared in good health and was always able to attend to her household affairs. I put her upon half drachm doses of rhus aromatica three times a day, which gave her permanent relief after two days use of the remedy.

On case second I changed from simple syrup to glycerine.

I give you these notes for what they may be worth to the profession. I hope others will test the virtues of this medicine and report results.

MARTIN'S BANDAGE.

BY W. W. DAWSON, M.D., CINCINNATI.

Martin's elastic bandage is another important and valuable contribution to surgical resources, one destined to revolutionize the treatment of inflammation and congestion of the extremities.

As a dressing it is exceedingly agreeable to the patient, giving such uniform support to the part that a sense of relief and comfort attends its application. Care is demanded in its use, but it does not require that skill which is absolutely necessary for the efficient adjustment of the common bandage. After one or two lessons patients are qualified to apply it and to regulate the amount of pressure. Undue pressure is but seldom made, so exactly does the elastic structure adapt itself to the part covered.

From disease or injury a limb is engorged with blood, and we say the inflammatory process has begun; this is the initiative; this is inflammation or congestion in its simplest form. As the case progresses other changes occur, the blood vessels become enlarged and elongated, their walls thinned, the contents begin to escape, leucocytes show a tendency to migrate, to escape into the connective tissue; then come swelling, tension, effusion, plastic and purulent—the accidents which follow engorgement. By the elastic bandage the redundant blood is driven out of a limb, and by it a re-accumulation is prevented. Heretofore we attempted this by the ordinary roller, but irregular support at one place, and strangulation at another, was the too common result.

In addition to this control of the blood, the elastic bandage gives such support to the capillaries and absorbents that effusion is soon taken up, swelling disappears, and ulcers close. The action is as striking in the chronic as in the acute—in an old ulcer as in a recent erysipelas, in a sprained ankle as in an inflamed finger, in an œdema as in a phlegmonous infiltration; in short, the products of inflammation more rapidly disappear under its action than by any measure or measures heretofore in use.

Again, it is of value where mechanical support is required, as in an exhausted bursa the surfaces may be kept in contact until adhesion occurs, or in a chronic dropsy of a joint where pressure is needed to prevent the weeping of the serous membrane.

Acute Erysipelas of the Leg.—I applied the bandage to a case of this kind, marked by all its peculiar symptoms, redness of the skin, great tension, effusion into cellular tissue, a well developed phlegmonous state with a tendency to diffuse suppuration. Under the application of the bandage the limb, in twenty-four hours, had assumed almost its normal hue, temperature reduced, and the swelling to a very great extent disappeared. This was the first case of acute disease in which I tried it, and the result was most gratifying; a case, the natural history of which requires from two to six weeks, was cured in less than three days.

Aborted Whitlow.—Gross justly remarks that abortive measures have seldom succeeded in this ugly affection, for the tendency is rapidly to suppuration. With the elastic bandage both the deep and superficial varieties may be aborted. If used early suppuration will be prevented, but if time has been lost, the suppurative action may be arrested, and the case rendered comparatively insignificant—that is comparatively painless.

For the fingers and on the limbs of children, a very light bandage must be used. Finding that of Martin too heavy, I procured what is known in dental parlance as "rubber dam," and cut it into strips suited to each case. The lightest variety is sufficiently strong for use upon the fingers. Care must be exercised so as not to *prevent* but to *control* the circulation in the part.

Sprained Ankle.—It has long been said that a sprained ankle is more to be dreaded than a broken leg. What occurs in a case of this kind, and how does the elastic act? In a sprain the ligaments are ruptured to a degree, small blood-vessels are broken, hemorrhage occurs in the peri-articular tissues. This escaped blood is a foreign body, and so acts; it generates, however, in the structures around and within the joint an inflammation of a subacute form, and although possessing but little conservative or reparative power, it seldom tends to a destructive, to a suppurative action. The swelling is not great, but it is firm, what might be called stubborn. When the bandage is applied the change is as marked as it is gratifying; it is as efficient in the ancient as in the recent case.

In reply to the question how it acts in these cases, it may be said that it arrests at once the inter tissual hemorrhage, and it supports the absorbents in taking up and carrying off the effused substances. A few hours are sufficient to reduce the acute case, a few days are necessary to bring about the same result in a case of long standing.

Compound Fracture of Thumb.—A man presented himself at my office one morning with the end of the thumb almost severed; the cut was oblique, and divided skin, muscles and bone; a small portion of skin was left on the ulnar side. I replaced the parts, and applied the "rubber dam" bandage; no suppuration occurred, and in a few days the union was complete.

Hydrops Articuli.—All surgeons know how difficult it is to cure these cases without resorting to intra-articular injections, a practice always hazardous. The fluid drawn off soon re-accumulates; this is repeated until the surgeon is worn out, and resorts finally to an irritating injection. The bandage here acts promptly by its mechanical compression of the hyper-secreting serous membrane.

In a case of this kind, pure hydrops articuli, not chronic arthritis, it had had no "John the Baptist" in the shape of acute inflammation of the joint forerunning it, being chronic *de novo*, I evacuated the fluid, applied the bandage, compressed the serous sac so that it could no longer weep; change occurred necessarily, no further effusion. The case was positively relieved.

Diffuse Suppuration.—This form of inflammation, following injury or disease, is promptly relieved by the judicious application of the bandage, the tissues are supported, the blood-vessels are compressed, proliferation and migration cease, and the effused material is absorbed.

In this condition the elastic must be frequently changed, so that the pus may be removed and the enclosed parts cleansed.

Indolent Ulcers.—These may be treated successfully, promptly cured, and the patient allowed to attend to his ordinary business. All practitioners know what difficulties have been encountered in the treatment of ulcers of the leg. In all plans rest is an essential element. The grafting process and the canal of Nussbaum have been most efficient, but to succeed with them the patient has to be confined to the recumbent posture. What a comfort it is to the patient, as well as a convenience, to close an ulcer of long standing without depriving him of one day's loss of time.

Acute Arthritis:—Whether the inflammation be the result of a trauma or from rheumatism, the bandage rapidly restores the joint to its normal condition. I have had the most gratifying results in dislocations of the elbow associated with great injury to the soft parts. With our best efforts, heretofore, anchylosis has too often resulted. The elastic controls the blood supply, and hence the degree of inflammation. It is kept at the reparative point, this side of that of suppuration or of too much plasticity. Passive motion for the protection of the function of the joint can be much sooner instituted.

Weight, Length and Strength of the Bandage.—Some care is necessary in selecting the bandage, as to its length, width and weight, and mode of application.

1. The limb should not be doubly covered, except where the bandage laps.

2. The ordinary bandage of Martin is not too strong for the inferior extremities, but one of lighter make is better adapted to the arm and forearm.

3. The "rubber dam" is sufficiently heavy for the fingers; a

thicker one acts too powerfully on the circulation, and makes too great pressure on the granulations.

4. Children require a lighter bandage than adults. The variety suited to the arm of the adult will be heavy enough for the leg of the child.

5. The width of the bandage must be regulated according to the part to be covered; it may range from one to three and a half inches.

Mode of Application.—But little force must be used in applying the bandage. As I said above, you desire to control, to regulate the circulation, not to prevent or obstruct it. In adjusting the heaviest elastic upon the leg, the weight is almost sufficient. Irregular pressure must be studiously avoided, the turns must press at all points equally. The sensations of the patient will often be a reliable guide in adjustment.

Inflammation of Ankle with a Strumous Tendency.—This little boy has an affection of the ankle, the result of an injury; the joint was struck several weeks ago, it was puffy and painful when I first saw it, and there was slight effusion in the sac.

The bandage, which you now see me apply, weighs one ounce and a half; it is too inches wide and three and a half yards long. I have been using it for less than one week, and you see the joint is almost if not quite normal. This change has been the result of the bandage alone; without it the low form of inflammation which had been established would have gone on for months, and perhaps for years, and have finally resulted in the destruction of the functions of the joint. Although the result of a trauma, the case impressed me as tending to a strumous degeneration.

This boy has not been restrained in his movements since he has been wearing the bandage. When presented at my office, one week ago, he was lame, and the joint tender; you now see that his gait is without a limp, and I handle the limb without giving him pain. Over the bandage he wears his stocking and shoe.

I have now, gentlemen, given you somewhat of my experience in the use of this recently introduced appliance. I think it would be difficult to overrate its usefulness. As I said in the beginning of the lecture, it is destined to modify the treatment of chronic and acute disorders of the extremities and it may have a wider range of utility.—*Good Samar. Hosp. Rep., Lancet and Clinic.*

INTRA-UTERINE MEDICATION.

Despite what may be or has been said against the safety of uterine medication, with continued experience and improved methods, we shall certainly continue this plan of meeting certain obstinate conditions of the uterine cavity. At the meeting of the British Medical Association, last August, our distinguished countryman, Dr. Battey, of Georgia, read a paper presenting his mode of intra-uterine medication with a solution of iodine and carbolic acid, to which he has given the name of *iodized phenol.* We condense Dr. Battey's paper from the Virginia Medical Monthly.

It is simply a concentrated solution of iodine in carbolic acid, and Dr. Battey does not consider it at all a chemical compound. In his experiments he prepared an iodized phenol of various strengths—one drachm, then two, then three and four drachms of iodine were found soluble in an ounce of glycerine. He says :

"The last and strongest solution proved to be decidedly escharotic in its action upon the tissues, and especially upon the heterologous growths of low vitality, and has been much used by the writer for attacking uterine cancer—more particularly to supplement the curette. The standard solution employed in intra-uterine medication consists of one part by weight of iodine dissolved in four parts of liquefied carbolic acid."

At first Dr. Battey employed glycerine to dilute the phenol, now he uniformly employs the solution in full strength. Any of the usual forms of applicator wrapped with cotton wool will serve sufficiently well for the application. Dr. Battey uses a slender, elastic hard-rubber probe, of which he is provided with several ready for use, with the cotton wrapping for each.

We quote now in full his remarks upon his method of application with the results he has observed :

Mode of application.—The writer selects six or eight of the elastic probes; he then breaks off from the lap of cotton four or five inches of its length, and with his fingers splits it into several fasciculi of such size as when wound upon the probes will enlarge them to a desired thickness. The end of a probe is moistened slightly, and the fasciculus of cotton wound spirally upon it. The cotton around the probe is now dipped into the iodized phenol, any redundancy allowed to drip away, and the probe passed into the uterus with a slow, spiral movement as it advances. At first, the probe is introduced but half an inch, the effect noted, and the probe advanced to the internal os, if deemed advisable, and then withdrawn.

Here, upon a first treatment, the case rests, to note the tolerance of the uterus for the remedy. At subsequent treatments, the probe may be carried to the fundus, and the first probe is followed by a second, and even a third or fourth, if well borne. The remainder of the wrapped probes are employed for wiping off the cervix and vaginal wall, if any of the phenol should have touched these tissues. The energy of the application is regulated by the size of the wrapping, the depth to which the probe is passed, and by the number of probes used. When a very decided impression is to be made, a backward turn is given to the probe in its withdrawal, so as to leave the saturated cotton in the uterus, there to remain twenty-four hours, and often until it is spontaneously expelled. The application is renewed every four or fourteen days, according to the energy of the treatment; in general, once in seven days is sufficient.

The writer has abandoned the use of sponge-tents in connection with the treatment set forth. When dilatation is required, he employs the cotton-wrapped probe, twisting it firmly into the canal by the spiral movement above indicated, and reversing the movement, the probe is withdrawn, and a soft cotton tent remains in the uterine canal. The dilating power of this is notably less than the sponge, but nearly equal to sea-tangle, and it is believed, entirely safe.

The results.—1. A perfect removal of all cervical mucus, which is promptly coagulated, and comes away adhering closely to the cotton. The probes subsequently passed bring the remedy directly in contact with the diseased membrane.

2. Always comparative, and frequently entire freedom from pain. This is a marked feature of the method, and in striking contrast with former experience. Carbolic acid is a local anæsthetic, and so numbs sensibility as to make the energetic application of iodine for the most part devoid of pain.

3. The iodine is so rapidly absorbed by the uterus, that the patient remarks its metallic taste in the mouth and throat usually in five or ten minutes after the application.

4. Softening, and more or less dilatation of the os and cervix.

5. Temporary arrest of leucorrhœa.

6. Watery discharge, sometimes bloody.

7. Exfoliation of the superficial layer of the membrane, which comes away in shreds, and sometimes entire, resembling thin glove kid.

8. Abrasions of the os heal promptly.

9. Disappearance of indurations of the uterus.

10. Permanent arrest of leucorrhœa.

11. Villosities of the endometrium are removed without resort to the curette.

12. Sub-involution of the uterus disappears.

13. The menses become regular and healthy; menorrhagia and scanty menstruation, as well as dysmenorrhœa, are remedied.

14. Appetite and digestion improve, and this in many instances without the use of medicines.

15. So thoroughly is the system impregnated with iodine, alteratives by the stomach are not used.

16. The form of the cervix and os is often completely changed. A large, puffy cervix, with very patulous, slit-like os, becomes even virginal in type.

17. Stenosis has not followed the treatment in any case noted as yet.

18. Barrenness from nine to fourteen years duration has disappeared in several instances.

Remarks.—Rapid, and, at the same time, satisfactory cure in chronic uterine ailments, such as are contemplated in this paper, are not attainable by any mode of treatment known to the writer. It is not proposed that rapid cures can be made by the method herein set forth. On the contrary, the long-standing and obstinate cases, such as usually fell into his hands, require many months for satisfactory cure.—*Obstetric Gazette.*

AURAL SYRINGES.

BY J. S. PROUT, M. D.

As announced by the card, I shall confine my remarks to ear syringes, saying very little on the general subject of ear syringing, and shall address them to those who, as general practitioners, have not time or opportunity to make themselves expert in matters of aural prac-

tice. I hope that what I say may also interest our friends, the druggists, one of whom recently told me that "ear syringes" are sometimes bought by men who propose to use them on an entirely different part of the body!

As the subject is an important one, our patients are entitled to explicit instructions from us in respect to indications, instruments, etc. I therefore lay it down as a rule, from which there is to be no departure, that no ear should be actively syringed unless there is something in it that it is important to remove. It therefore follows, as a matter of course, that if the physician cannot examine the ear and determine that there is something in it that needs to be removed, he is not competent to advise for the case; and also that if, in despite of this inability, he prescribes syringing, he does so blindly, at hap-hazard, ignorantly, and is guilty of malpractice (bad practice), even though no appreciable injury is sustained by the patient.

What then are the things that we are to remove from the ear? They are foreign bodies, however they may have gotton in, wax and pus, which last may be either dried and caked in the auditory canal, or in process of constant formation and discharge.

Nearly all the objects that enter the ear from without may be removed by means of the syringe, and no one who has not given careful attention to the treatment of aural diseases should ever resort to any other method of removal.

When one reads and hears of the horrid work that has been and is still occasionally done by legally qualified practitioners in the search after foreign bodies that perhaps have no existence—drum-membranes destroyed, ossicles pulled out, etc., etc.—one is tempted to wish that some such unscrupulous imcompetent may be sued for malpractice and mulched in heavy damages—*pour encaurager les autres!*

For the purpose of classification I shall divide syringes into 1, piston-syringes; 2, bulb-syringes in which the injecting nozzle is directly attached to the bulb; and 3, bulb syringes in which the nozzle is connected with the bulb by a flexible rubber tube of several inches in length, the water being drawn into the bulb through a similar flexible tube, as in Davidson's, or through a short metallic tube, as in the Derby or the American.

In the drug stores small cheap glass or pewter piston-syringes (made originally for the penis, perhaps) are sold for the ear, for which they are dangerous and almost worthless. I was told by a druggist the other day that a small glass syringe of this sort broke recently in a lady's ear while in use. The result was a cut on the cheek—strangely enough and very fortunately, the ear itself was not injured. Small hard-rubber piston-syringes of various styles are also sold for the ear, one of which, called the "ear syringe, is, in careful hands, a good instrument. I have used one of this sort, holding about ½ ounce, for years, and find it sufficient for all ordinary purposes. When the piston does not work freely there is apt to be a jerky movement, and the delicate skin lining the auditory canal is apt to be injured. It is also true that no one can use such an instrument satisfactorily and safely on himself. I therefore make the broad general statement that for home and self use, on the ear, a piston-syringe should not be used. It is both dangerous and unhandy.

The different bulb-syringes of the first variety (second class) are better than tnose of which I have just spoken (first class), but they are less safe and less easily used than those of class 3, of which Davidson's may be ranked as first and best, the type of the good syringe for the ear for home or self use. The power is applied by the hand to the bulb, and the force of the stream can be regulated with great nicety. The intervention of the flexible tube between the bulb and the nozzle prevents any possibility of damage through the force exerted by the hand, as may easily happen in using the piston-syringes. The nozzle may be held by the syringer or by the patient, with its point in the beginning of the external meatus. Any sudden movement of the head will be away from danger. This syringe, or one of this class, is to be found in almost every well-regulated household.

Another advantage of this class (3) is that when the syringe is in action, if the source of water-supply be raised it will act as a douche and give a steady stream of water to the ear, the force varying as the difference of level between nozzle and water-surface is great or small. Thus the Davidson syringe, besides its ordinary uses, is the best attainable domestic ear-syringe, and is as good a douche for the ear as we need, while the others of the third class are nearly as good.

The last addition to the family is Hall's Patent Health Syringe, which may be put into our third class. A glass jar for holding the water has attached to its top a rubber bulb by means of which the air is condensed in the space above the water, which, through a tube that goes to the bottom of the jar and terminates externally in a flexible tube, is thus forced out in a steady stream at a moderate pressure.

What fluid is to be used in the syringe? Warm water of about the temperature of the blood (98½° Fahrenheit) is sufficient for all ordinary purposes. (Nothing cold should ever be put in the ear.) When there is a purulent discharge, a solution of borax (one or two teaspoonfuls to the pint) may be used, as it is both cleansing and healing. This or a solution of carbonate or bicarbonate of soda is sometimes used to soften wax, as the alkali somewhat increases the solvent power of the water; but this is seldom needed. Castile soap may be added to the water; but, as a rule, it is better to avoid fluids containing organic material. (For the same reason it is unwise in earache to pour in oils, molasses or such substances, as they make the ear dirty, and so favor the developement of disease. Warm water or this, with three times its bulk of laudanum, will usually do more good and no harm.)

It is essential that only clean water be taken into the syringe. This is easily managed by using two vessels, one a cup or finger-bowl to catch the water that flows from the ear, while in the other the clean water is held. By this precaution the syringe is always clean, and cannot carry infection from one patient to another.

Syringing the ear may sometimes produce disagreeable effects, such as cough, giddiness, or even fainting. Among other causes these may result from the use of water of too high temperature. Dr. Cornwell mentions a case in which faintness came on whenever the water was "a little more than milk-warm." (Cincinnati Lancet and Clinic, Nov. 8, 1879, p. 360.)

For ordinary syringing the temperature may be about 98° Fahr.; for the douche, for the relief of acute inflammation, it may be some-

what warmer, but in any case the feelings of the patient are the only safe guide.

Roosa (Diseases of the Ear, 4th Edition, 1878, p. 127) says: "I think the small hard rubber syringe is the best, though a Davidson's syringe does very well." Turnbull (Dis. of the Ear, Phila., 1872, p. 86) advises Davidson's syringe, and says if this is not at hand a piston syringe (described and figured) may be substituted. I am sorry to say that he violates what I hold to be a cardinal rule in ear-syringing when he says (p. 89): "Wilde's basin is of great service in these cases. Its concave part fits accurately the curve beneath the lobe of the ear, and the perforated septum *strains the clean water from the dirty.*" (Italics mine.) This is disagreeably suggestive of dirty instruments, and of the communication of disease from one patient to another. Von Troeltsch says: "There can be but one object in syringing the ear; that is, the removal of something from it. You will be still more surprised when in your practice you find that almost every aural patient, who has not come to you at first, has been ordered to syringe the ears. The patients who tell you this will often very earnestly and truly tell you that nothing was removed." (Trans. by Roosa, 2d Am. Edition, N. Y., 1869, p. 93.) Burnett (Diseases of the Ear, Phila., 1877) only mentions the piston syringe, and repeats the same advice in his "Hearing; and How to Keep It" (American Health Primer, No. 1, Phila., 1879) an excellent little book, of interest to us all, and one that I wish I could induce every member of this Society to read. It would then be well for them and better for their patients. I also wish that it could receive the wide general reading that it deserves, and for which it was intended. Those with ear trouble would then better appreciate the quality of the advice they receive. Light is good in dark places. The influence for good on the profession, of correct ideas among the laity, cannot be overestimated.

In conclusion, let me say that I always protect the reputation of a professional brother if possible. Let me cite a case to show why this cannot always be done: A very intelligent patient came to me for treatment, saying that his physician had assured him that there was no wax in his ears. I found each ear nearly full of wax, which I was obliged to syringe out. I did not comment on this unfortunate contradiction, nor did he, but it is not safe to infer that he did not notice it, and did not draw his own conclusions.

The instinct of self-preservation prompts patients to respect a physician who candidly says he does not understand some disease of theirs that is entirely out of his line, and he maintains his own self-respect by doing so. But how does the case stand when the patient discovers that the physician professes to understand matters concerning which he is perhaps entirely uninformed? Should not each man know and honestly recognize his own limitations?—*Soc. Co. Kings.*

TUBERCULOSIS AN INFECTIOUS DISEASE.

We have at last some daylight let in upon this most obscure field in nosology. Tuberculosis will henceforth take place among the infectious diseases. Tuberculosis is a sort of key-note in the whole gamut

of internal diseases, and the most far-sighted pathologists and clinicians have always expended the greater part of their lives in its elucidation. Tuberculosis runs into every department of medicine, into internal medicine, into surgery, into obstetrics and gynecology; it is the key-stone in the arch of pathology. Physicians, surgeons, obstetricians, every one engaged in the science or art of medicine will hail with pleasure anything definite, anything settled in the history of tuberculosis. The transmissibility of tuberculosis has been hinted at long ago, but it has never until now received the sanction of such authority as to establish its acceptance. No one will dispute the accuracy of Cohnheim's investigations or the validity of his conclusions. We present our readers a full abstract to-day of the remarkably lucid and comprehensive report made by Cohnheim to the Leipsic faculty a few months ago.

The report marks an epoch in the history of this disease which in its practical significance far exceeds in value the works of Lænnec and Virchow. It is taken from the Medizin. Neuigk f. prakt. Aerzte, April 3, 1880:

The most important advance in our knowledge of tuberculosis was contributed by Villemin's discovery of the transmissibility of this disease. Although the discovery was doubted for a long time, by Cohnheim as well as by others, it must now be looked upon as a fully established fact, as proven by the following investigation of Cohnheim and Solomonsen:

If the smallest particle of tuberculous matter be carried through a lineal incision of the cornea into the aqueous chamber of the eye of a rabbit, there appears, after a period of incubation of about six weeks, an eruption upon the iris of minute nodules, which increase to a certain size and then undergo caseous degeneration, to be followed in the course of months by a more or less general tuberculosis of the lungs, peritoneum and various other organs.

Of the greatest significance is the fact that this result occurs regularly, but only when real tuberculous matter has been inoculated. We may therefore utilize this inoculability as a diagnostic criterion of tuberculous products, a fact which is so much the more important in that the anatomico-morphological character of tuberculosis does not suffice in all cases to differentiate this affection with certainty from syphilitic products on the one hand, and on the other from other non-specific, but simply chronic irritative conditions. Neither the nodular form, the histological structure, the occurrence of giant cells, caseation, nor all these circumstances together are absolutely characteristic of tuberculosis. The only absolutely perfect and certain criterion is the capacity and infection.

And taking this criterion as a stand we must include as tuberculous, caseous pneumonia, the so-called caseation of lymph glands, as well as as the fungous joint inflammations in most cases, while simple elements like lupus tissues not being inoculable are not tuberculous.

As carriers of the infection of tuberculosis we assume parasitic specific organisms, though it is true that we are not as yet able to demonstrate them with certainty.

The tuberculous virus reaches the body in the great majority of cases through the inspired air. Thus arises first tuberculosis of the lungs,

which may then develop tuberculosis of the pleura, of the bronchial glands and of the great air passages. In some rare cases, the tuberculosis may originate in the larynx. Later the virus is carried by the sputa into the alimentary canal. Thence develops the so frequent clasic picture of pulmonary-intestinal tuberculosis.

On the other hand, the virus may first enter the digestive canal, an occurrence observed most frequently in children and dependent upon the ingestion of milk from tuberculous cows, that is of cows suffering from the fecal disease. Thus arises the *phthisis mescraica*. It is probable also that the so-called tuberculous inflammations of the mouth and larynx, as well as the caseous swellings of the cervical lymph glands arise in this way.

According to reports of Weigert tuberculous menengitis may then follow in certain cases from a migration of the tuberculous poison into the cranium from the upper nasal cavities. But urogenital tuberculosis is to be regarded as produced through excretion. The tuberculous virus, like other corpuscular elements, penetrates the glomeruli, having passed from the blood into the urinary passages and then develops its effects along these preformed canals.

In cases of primary bone and joint tuberculosis which are mostly referred to traumatic causes, it must be assumed that the poison is already in the blood and is simply extravasated by the trauma in greater quantity in the affected regions.

To account for the rapidity and universality of the dissemination of tuberculous products in the cases of acute generalized tuberculosis we must invoke a profuse inundation of the juicy organs with tuberculous virus. This explanation is rendered probable by the anatomical findings of tuberculosis of the thoracic duct and of the pulmonary veins in such cases.

On the other hand there are many cases, as is well known, of purely localized tuberculosis, in which the disease is found limited to a definite locality. But there is no essential difference in these cases. For the local limitation of the process is either explicable by the short duration of the disease (as in the local tuberculosis of the aged) or, where it has existed long, it is still in process of extension, though the process is slow. But it is perfectly certain that tuberculosis may result in perfect recovery. That the so-called local tuberculosis represents nothing essentially different is proven above all things by the fact that its products are just as inoculable as are those of general tuberculosis. The relation between local and general tuberculosis is very much like that between chancre and constitutional syphilis. A chancre, whether soft or hard, may induce a general infection of the body, may do it, but not must do it. Even so it is with local tuberculosis.

For the rest individual predispositions come into play. In the experimental induction of tuberculosis, differences manifest themselves with regard to the extension of the process and the manner of the extension.

But so far as regards the *phthisical habitus*, it has nothing to do with the susceptibility to tuberculosis. Such individuals are already tuberculous, and are tuberculous mostly by heredity. Tuberculous virus can pass into the products of generation, into the semen and ovum. The disease is thus present in the new-born child, but may break out only after a lateral stage of many years, just like hereditary syphilis in

which, however, the latest stage is usually shorter. But during this latest stage the virus present in the body so effects the development of the body as to give rise to phthisical habits.

So, in tuberculosis, everything depends on the virus. Such a thing as predisposition to tuberculosis is false. We discover at all points the closest analogies between tuberculosis and syphilis. Both require, above all things, infection, transmissibility of the disease from person to person.—*J. T. W. in Lancet & Clinic.*

IODINE A SUBSTITUTE FOR QUINIA.

BY FORDYCE GRINNELL, M. D., MARYVILLE, TENN.

While occupying the position of Government physician at the Wichita Indian Agency, Indian Territory, I saw a statement quoted from the St. Petersburger Medical Dochenschrift on the value of iodine as a substitute for quinia. The statement made by the author, Dr. J. Nonodnitschauski, that "when given boldly, ten to twelve drops of the tinct. in a half glass of sweetened water every eight hours, iodine will never rank second to quinia in the treatment of intermittent fevers," the more forcibly impressed me, because at the time malarial diseases were prevailing extensively, and while I had been using the sulphate of quinia at the rate of one ounce per day, my stock suddenly became exhausted, and no article ordinarily used as a substitute remained in the dispensary. Our distance from medical supplies rendered our condition, under these circumstances, very embarrassing. Hence, the readiness with which we seized upon any suggestions which seemed to afford means to fight our great enemy—malaria.

Having then a good opportunity to test the value of the remedy, I began by following the plan suggested by Dr. Nonodnitchauski, that is, giving ten drops of the tinct. in one-third glass of sweetened water, thrice daily to adults, children receiving proportional doses. The results far surpassed my most sanguine expectations.

Indeed, I thought the statement rather extravagant, that iodine when given as above indicated, "will never rank second to quinia in the treatment of intermittent fevers."

Subsequent experience however, both in that country and in this, has led me to conclude that the anti-periodic powers of iodine are superior to any other remedy of the materia medica save quinine, and that it is by far the best known substitute for quinia.

At that time I treated 135 cases of intermittent fever, 74 being males and 61 females; these included children and in some instances infants. The quotidian and tertian types of the fever were the forms principally presented. I also treated four cases of diarrhœa and eight cases of neuralgia, each of malarial origin, using the same remedy, only adding astringents or opiates as indicated. One hundred and forty-seven cases were thus treated with the iodine, and the results were fully equal to those treated with the sulphate of quinia.

The remedy seemed to act almost as by magic, in many instances the paroxysms were not repeated after the medicine was given, though

the doses were repeated for a day or two after the cessation of the fever.

In cases of enlarged spleen there was a more speedy reduction in the size of that organ than when the sulphate of quinia was used.

One important item in its favor was the fact that it was much more agreeable to take than quinine, and this with a large part of our population proved a potent argument in its favor. The iodine at once became a more popular remedy than quinine, with the masses of our people.

The nationality of those treated embraced the white, the Indian and the negro races.

Knowing that some of my brother practitioners at other agencies were also short of anti-periodic remedies, I at once reported my successes to my friend, Dr. Irving W. Smith, physician to the Kiowa and Comanche Agency. He reported some time after—"I have tried the new remedy in a number of instances, with both red and white patients, in each instance with complete success as far as reported. I have only a few ounces of quinia or cinchonidia, and regard the new remedy as a special blessing at this time. I have added the tinct. to simple syrup, a drachm to the ounce, with enough iodide of potassum to prevent precipitation on the addition of water."

I also reported upon the value of iodine as a substitute for quinia to the Cincinnati Lancet and Clinic, and several succeeding numbers contained testimonials from various parts of our country as to its decided value. Since coming to Tennessee I have had fewer cases of malarious character with which to deal, but in these few I am perfectly satisfied with its results, as they have been fully equal to those recorded in my government practice.

Several practitioners along the Tennessee river, where miasmatic fevers are more prevalent, have, at my seggestion, used the iodine, and they too have been astonished at the favorable results. In one instance the doctor informed me that he had used quinia and the various alkaloids of cinchona without avail in an obstinate case of malarial fever in a child, that he had also tried arsenic and other anti-periodic remedies of repute, but without success; that he finally prescribed the iodine, with a perfect cure as the result. Previous to this he said he had so little faith in the remedy (although it had been proposed to him some time before this) that he had not tried it, and only because of want of success in the use of all other remedies had he tried it in this instance, but he now proposed to give it a further trial.

The fact that the cost of iodine is so little in comparison to quinia, especially renders it a boon to the poorer classes, who can ill afford to purchase quinia, and the physician who treats them and furnishes the remedy, finds his bill for drugs not an insignificant item of his expenses, with little to show in return.

The fact that iodine exerts such a pronounced effect upon those very glands which appear to harbor the malarial poison, seems to render its great value in these cases quite philosophical.

It only seems strange that in the settling up of the great West, with malarial poison ever opposing the onward march of civilization, and the great scarcity and high price of quinia, that the value of this remedy had not been earlier and more generally appreciated.

It is safe to say that hundreds of persons have died of malarial disorders, especially in the territories and regions remote from medical supplies, because of the scarcity of quinia, or because it could not be obtained at any price, when perhaps at the same time iodine in quantity was in stock in the dispensaries.—*South. Prac.*

SHOULD WE BANDAGE AFTER LABOR, AND WHY? AND IF NOT, WHY NOT?

BY ALEXANDER ELWELL, M. D., VINCENTOWN, N. J.

These questions have presented themselves to my mind, from the fact that I have found a growing disposition on the part of some of my brethren to break in upon the long and useful custom of bandaging our parturient patients. Not long since, I called to my assistance, in a case of labor, a gentleman whom I have always held in high esteem, both for his medical opinion as well as his gentlemanly and social qualities, who, upon the question about the bandage, remarked that it was of but little importance whether she was bandaged or not; this set me to thinking over the subject, a subject that Prof. Hodge in his lectures laid much stress upon, and which other authors, such as Dewees, Meigs, James and Ramsbotham, had led me to think was of very much importance. The disciples of Hannheman do not bandage, but I see no cause why we should follow in their footsteps. The principal object which the bandage serves is to brace the bowels, and give artificial support in place of that which they have lost through the extreme laxity of the abdominal muscles, and to prevent the faintness frequently attendant on the sudden removal of a certain degree of pressure. I also think that a bandage, properly applied, stimulates the uterus to contraction; though of course too much reliance must not be placed on it for that purpose, but the uterus should be induced to contraction before the application of the bandage by gentle and continued friction over and to it. Again, I think the bandage serves other purposes—such as the prevention of anteversion, lateral obliquities, and even prolapsis—by relieving the uterus of the weight of over-distended muscles and dislocated intestines, until nature and time comes to the relief, giving tone and strength to surroundings. My idea of a bandage is one that is wide enough to come from the ensiform cartilage well down over the hips, with gussets or gores, fitting smoothly, showing but little disposition to work up; it should be worn from six to eight weeks; then we will find our patients to walk with more erect, firm and elastic step, complaining less with backache and headache and general lassitude. A bandage thus made and worn, with the addition of two or three napkins under it, next to the skin, will keep us advised of any tendency to hemorrhage, should it exist.

I am certain I have seen flooding where there was no importance attached to bandaging or none applied, that might have been avoided in part, or perhaps altogether. Sometimes, in hasty delivery, the birth occurring before the arrival of the accoucher, the patient being allowed to lie without the proper attention, concealed hemorrhage

does occur. One such case comes very vividly to my mind. I was sent for, and upon my arrival I found, to my great astonishment, my patient dead. The child was born, and the placenta self-delivered. Upon questioning those around, no satisfactory answer could I get as to the supposed cause of this sudden taking off. Had there been much flooding? I asked. Not more that usual in cases of confinement. I was not satisfied, and made an examination post mort, and found the uterus filled with clotted blood, and as large as at the seventh month of pregnancy. Now, had the uterus been held firmly in place by bandage and napkins, I cannot help thinking that much of the flooding might have been avoided, and the patient's life saved. Other similar cases I have seen, and am led to believe that the timely use of the bandage, and preceding manipulations, saved my patient. So thoroughly am I convinced of their usefulness, I would not dare to leave off their use.

I have endeavored to give some reasons why the bandage should be used, and the negative side of the question I leave to those to answer that may differ from me. Should there be good reasons given why bandaging may or should be done away with, then would I consider we are rid of very much trouble.—*Country Practitioner.*

[A bandage is useful in giving support to the empty and relaxed condition of the abdominal walls, and may, by its pressure, tend in some measure to maintain the womb in a state of contraction; but we have found from experience that it should not be hastily applied, as usually advised, because it interferes with the manipulation necessary to detect contraction and guard against post partum hemorrhage.—ED. RECORD–W.

A PLEA FOR CHLOROFORM.

A. G. Smythe, M.D., of Baldwyn, Miss., writes in the New York Medical Record:

Will you be so kind as to permit a backwoods general practitioner, to protest against the summary conviction and capital execution of chloroform as proposed in a recent number of the Medical Record by your Milwaukie, Wis. correspondent. While I am and have all my life been only a general practitioner, most of the time in the country, and cannot marshal surgical cases by the thousands, yet I propose to offer a few facts that have come within my own knowledge.

At the outset it will be admitted that chloroform is a potent agent, and should be used with the utmost caution and prudence, the routine description of which will be supposed to be well known to your readers.

Immediately after the publication of the success of the administration of chloroform by Sir James Y. Simpson (say as early as January, 1848), I procured a small quantity, with which I experimented upon myself in all the ways that I could without an assistant, and discovered that it almost invariably caused nausea and vomiting if taken a short time after eating. As early as February in the same year (1848) I administered it to a small boy, aged eight years, without any assistant or any person being present, and successfully performed a tedious and painful minor operation in the mouth, entirely free from pain or any

untoward circumstances. (Will not give it in operations upon the nose, mouth or throat, at present—it is not safe.) From that day to the present time have used it—as all the therapeutic agents are used by myself, with prudence, paying but little attention to the host of so-called contraindications, except in the operations parenthesized—in a large number of capital, and a host of minor operations in surgery, also in general practice; in at least one thousand and four hundred, out of two thousand and six hundred cases of obstetries, without a failure in a single case. Only in four cases were there any symptoms to cause alarm on the part of those present, and but two that caused solicitude to your contributor, There is no agent in the whole materia medica with which your contributor has had such uniform success as that of chloroform, having at no time in thirty-two years failed to obtain all that was anticipated when it was given. No mortality (not a single case), where chloroform could be charged with any agency in causing a fatal result. There is no other remedy (not even quinine, and I have but few charges against it), which has been given to the same extent, that has given such entire satisfaction as the one in question, and now, at this late day, to presume to summarily dismiss a remedy which has passed through such an ordeal, and that can muster an array of friends and vouchers who, in point of character, skill and numbers, would strike consternation to the enemies of chloroform, the proposition as made by your contributor is, to say the least, summary and premature. Give chloroform and its friends a hearing; raise a committee or commission of investigation. The friends of chloroform do not fear a fair investigation.

In the future there may be discovered (I trust there will be) a safer and more pleasant anæsthetic than chloroform; but that it has been done up to the present time is doubted by a very large and respectable number of the profession throughout the civilized world.

Did time and space permit, much might be urged in this article as to the mode of administering chloroform, as compared with other remedies of the same class. Being more active in its action, it should be given slower, is all that will be said at present.

As an apology to your readers; will say that your contributor is by no means as young as he has been, and is at present almost blind; but was determined to come to the rescue of chloroform; not, however, that he had any fears that it would be dismissed from the Materia Medica.—*N. Y. Med. Rec.*

Local Anæsthesia with Bromide of Ethyl.—M. Terrillon stated at the Societe de Chirurgie that he had employed the bromide of ethyl about a dozen times in operations with the thermo-cautery. In a minute or two a white patch indicating cutaneous anæsthesia is produced, and on the pulverization being continued, insensibility of the tissues is produced to the depth of two centimeters. The production of the white patch is not essential, as anæsthesia may exist when it is absent. The results have proved very satisfactory, but in two cases M. Terrillon did not succeed, owing, as he believes, to the pulverizators which he employed having too small a jet.—*Gaz. Med.*

ABSTRACTS AND GLEANINGS.

Sulphur and its Compounds in Skin Diseases.—Dr. L. Duncan Bulkley, of New York, in the American Medical Association, presented a paper on this subject. He referred to the great popularity which sulphur had had in the treatment of skin diseases, and of the indiscriminateness of its employment. His present aim was to show in exactly what diseases sulphur really relieved, and how it should be administered.

First, as to its internal use. *Pure sulphur* was seldom given alone in skin diseases. In eczema about the anus and genitals, however, it is very useful, especially if there is any constipation or piles. It may be given with equal parts of cream of tartar, in teaspoonful doses. Sulphurous acid is rarely used internally.

Sulphide of calcium is very valuable in skin lesions attended with suppuration. In acne it is often useful, but chiefly in those cases which have a considerable pustular element. It is not of much use in acne rosacea. In hordeoleum it is very valuable; also in furunculosis, relieving not only the symptoms, but preventing further crops of boils. Like testimony may be given regarding its effects in carbuncle and suppurating buboes. True, non-parasitic sycosis is sometimes benefited by sulphide of calcium. The drug is liable to be poor, and should have its characteristic smell of sulphuretted hydrogen. Dr. Bulkley usually gave gr. ¼ q. i. d.

Sulphuret of potassa probably has the same effect as the sulphide of calcium.

It is undoubtedly the sulphur that does the good in these cases, for other combinations of sulphur, such as the hypophosphite and sulphuric acid, have been found similarly beneficial. A wonderfully valuable combination of sulphur is that known as "Startin's Mixture":

℞. Magnes. sulph.....ʒj.
Ferri sulph.....ʒj.
Acid sulphur. dil.....ʒij.
Tr. gentian.....ʒj.
Aquæ.....ʒiij
M. Sig.—ʒj dose after meals.

This is very potent in reducing cutaneous congestion in such conditions as erythema multiforme, erythematous eczema and urticaria.

In regard to the use of natural sulphur waters, some benefit is obtained from them, but it is impossible to speak definitely of them until more data are collected. The speaker wished help from any in collecting such facts.

Externally, sulphur has gained its widest reputation in the treatment of scabies, for which it is almost a specific. It should be remembered that sulphur is an irritant to the skin.

It is also beneficial in acne, either in the form of the pure sulphur or the hypochloride, the latter being used as an ointment, about ʒj to ʒj. Sulphur will also destroy the parasites of favus, ringworm and tinea versicola—pure sulphurous acid being the best form for these.

Sulphur vapor baths are of value in very few diseases of the skin. They stimulate the skin and liver, and they destroy skin parasites; but not much more can be said for them.

Jamaica Dogwood.—A writer in the Georgia Eclectic Medical Journal says of this new remedy:

In toothache it is an absolute specific where a cavity exists. Saturate some loose cotton with the tincture and insert it in the cavity and the pain will at once vanish. I have treated several hundred cases in this manner without a single failure.

I have experimented upon myself and the following are the provings: I commenced with small and repeated doses until I got the full physiological effect. The first sensation is a fullness and warmth through the chest, strong heart beat and full pulse; this is followed by great internal heat which slowly extends to the surface and is followed by perspiration. Should the medicine be still further continued, a violent headache is the result which passes off in a few hours. It has been proposed to substitute it for opium as it leaves no bad effects, whilst the latter disagrees with a large number and in all cases deranges digestion. I find that Jamaica dogwood is both an anodyne and a narcotic, but it is dificult to measure the dose to produce this result. Enough must be taken to produce diaphoresis and sleep, but then it becomes necessary to stop the administration, otherwise headache will result. I usually prescribe:

℞

F. Ex. Jamaica Dogwood..... ..... ℥ i.
Elixir Simplicis..... ..... ℥ iii.

M.

Sig. A teaspoonful every half hour until perspiration ensues.

I have used it with great benefit in angina pectoris and combined with yerba in the cough of phthisis.

In intermittent fever I find it answers the purpose as well as quinine, abating the paroxysm in a majority of cases.

In sciatica I find it of the greatest benefit. In six cases that I have had under my care I succeeded in effecting a cure by the internal administration of Jamaica dogwood and the external application of mullien leaves steeped in warm vinegar. Nerve stretching and the hypodermic injection of morphia and chloroform will now be of the past.

It will be my first treatment in acute rheumatism, and judging from analogy, ought to be successful.

I trust that others will investigate this drug and give us the benefit of their experience.

Oxalate of Cerium in Coughs.—Dr. Morje, in a report upon the use of this article in St. Luke's Hospital, says:

The wards were evidently quieter while those requiring cough medicines were taking the oxalate than at other times. The remedy was on several occasions entirely intermitted in the wards for a few days, and then resumed as each case came to require it. In about twenty-four or forty-eight hours after stopping it the noise and complaining would increase.

The best effects were noticed in the early stages of phthisis, or in chronic bronchitis; but a hoarse, harassing cough, with profuse expectoration in the third stage, was in several cases relieved, the cavities being then emptied without violent coughing or great effort.

The drug was not thoroughly tested in acute cough, but my impression is that it is less efficient in acute than in chronic cough, whether pulmonary or laryngeal. Nausea and vomiting became rare among the phthisis patients during the time it was used. It never disturbed the stomach, but, on the contrary, appetite and digestion often were speedily improved.

In dyspnœa having an asthmatic element, it doubtless affords more or less relief. In dyspnœa due to loss of normal lung substance, it can give the relief only which is procured by checking the coughing; during coughing the legitimate functions of the still healthy portions of the lungs are more or less arrested.

Frequently sleep was restored, and occasionally considerable drowsiness attended its use for a time, but these effects were not attributed to any narcotic property of the drug, but to the relief of the cough, which allowed the patient to make up for previous loss of sleep.

The patients taking the oxalate were weighed weekly, and several very soon showed marked gain.

No dangerous symptoms were ever observed attributable to the drug. The largest dose given was twenty grains. This dose was never repeated the same day, but was given, in a few instances, to patients taking 10 grains twice at other periods of the day. No complaint was ever voluntarily made of its causing dryness of the mouth, but several of the patients questioned on this point admitted that it produced this symptom at first, but declared that after taking it a few days they ceased to notice it. There were now and then complaints of its producing a sensation of tightness in the chest, and of its drying up the expectoration, but complaining of these symptoms was common when the oxalate was not being used.

The Opium Habit—A Possible Antidote.—The Louisville Medical News, May 29, contains an admirable paper from the pen of Prof. E. R. Palmer, on "The Opium Habit—a Possible Antidote."

This paper begins with a reference to the great physical distress and pernicious influence induced by the opium habit. Reference is next made to the various claims of remedies as a curative of this habit, which are disposed of in the following words: "If any man has yet discovered a cure for opium eating, I am sure the medical world is not aware of it."

Prof. Palmer goes on to say that recent experience has led him to hope that he has discovered a cure in the fluid ext. of coca, made by Parke, Davis & Co. This drug Prof. Palmer employed in practice with such results as satisfied him that it possessed uncommon merit as a remedy in the treatment of the opium habit.

He says, after relating several cases in which he employed this agent: "These are very brief and slender claims upon which to base a claim of discovery; and while I might supplement them by several cases of ordinary hypochondriasis relieved by the agent in question, I do not deem it worth while, as my only desire is to direct professional

attention to the administration of coca in the treatment of the opium habit.

Erythroxylon coca is a native of the eastern slope of the Andes. It is cultivated in the tropical valleys of Bolivia and Peru. The greatest of care is given to its culture by the natives. An idea of its importance as an agricultural product may be gained from the fact that the duties upon coca in Peru amount yearly to four hundred thousand dollars. The Peruvians are preeminently a despondent, an unhappy race, and coca is their balm. To them it is a relic of departed days of glory, and under its benign influence they enjoy in dream and delirium the halcyon days of Monco Capac.

Prof. Steele, of the American Pharmaceutical Association, from whose article on coca I glean these facts, says: 'Coca is both salutary and nutritious; in fact, the best gift the Creator could have bestowed upon the unfortunate Indians. They always carry a bag of leaves suspended from their necks, upon which they draw three times a day with as much pleasure and delight as a connoisseur in tobacco smokes a fragrant Havana. It imparts brilliancy to the eye and a more animated expression to the features, agility to the step, and a general appearance of animation and content.' Indeed, one can scarcely read Prof. Steele's article without wishing to test the virtues of this great antidote for the blues. The ordinary dose for adults of the fluid extract is a tablespoonful."

The opium habit is a most unfortunate condition, and anything offered for its relief should be carefully tested. Prof. Palmer's experience with the use of coca goes to show that if not a positive cure in every case, it merits professional attention as an agent of great value. —*Md. Med. Jour.*

Arsenic in Chorea.—According to Bouchardat's Ann. for 1880, we find that, from observations made in the service of M. Siredey, by M. Pomel, upon the treatment of chorea, the following deductions are made:

1st. Of all the remedies employed in chorea, those which are the most rapid and sure are the arsenical preparations; particularly arsenious acid, which at once produces rapid amelioration of the symptoms, and brings about a speedy cure.

2d. Grave cases of chorea that have resisted other treatment yield, frequently with promptness, to arsenic.

3d. To obtain the full benefit of the arsenical treatment, it is necessary to administer the medicine in such doses as to produce, as speedily as possible, the constitutional effects or signs of arsenical saturation.

4th. Even in children affected with chorea, no hesitation should be felt in giving strong doses of arsenic, in order to reach the point of saturation quickly.

5th. Without denying the possibility of danger in the use of arsenic in the treatment of chorea, yet no case has thus far been recorded to establish the fact.

The preparation used by M. Siredey is Boudin's solution, containing 1 milligram (1-65th of a grain) of arsenious acid to 1 gram (15 grains) of solvent.

M. Siredey commences, in the case of a young and moderately vig-

orous subject, with ten grams of the solution a day, well diluted, and increases the dose each day by five grams. This dose is first diluted and then taken in divided doses during the day. Should vomiting or nausea occur the quantity must be diminished. For a child of eight or ten years, from two to four grams of the solution will be sufficient to commence with, increasing it daily by two grams.

Note by Translator.—As the solvent in Boudin's preparation is not given, Fowler's solution may be substituted. Its equivalent dose would be twenty minims daily, increased in the above proportion.—*Med. and Sur. Rep.*

Strong Calvanic Current in the Treatment of Sciatica.—Dr. V. P. Gibney, of New York, read a paper on this subject. In 32 cases thus treated at the Hospital for the Ruptured and Crippled, 24 were entirely relieved, 3 moderately relieved and 5 not relieved. The currents were given daily; sixteen of the cases had had no relapses at date; several others had only slight relapses, and only four had a permanent return. Several cases were related. In one, twenty-seven cells were applied for ten minutes daily for several days, with rapid relief. The duration of the disease in the cases reported varied from a few weeks to several months.

The current should be a stabile one; the labile current is not a constant one. The speaker described the best form of battery. The current should be just as strong as the patient can bear it. The application should be given for ten minutes, or even fifteen, if possible. It should be given twice a day at first, if possible, and kept up for fifteen or twenty days. If by that time no good results ensued, it had better be discontinued. Six to ten seances may secure success. The descending current is preferable.

Dr. A. D. Rockwell, of New York, said that electricity in any form will not always cure sciatica. He cited cases cured by the faradic current.

Dr. L. D. Bulkley, of New York, referred to two cases relieved by the strong galvanic current.

Dr. Geo. M. Beard, of New York, spoke of the relative value of strong and weak currents. In whatever way electricity may be given, it will sometimes cure neuralgia. Practically, he did not find much difference in results whichever way he applied the current—although, on the whole, the positive pole is somewhat soothing, and the negative irritating. He thought that there was much value in the treatment suggested, but there was a caution needed, for he had seen cases injured by over-doses of electricity. He would never begin a treatment of sciatica with such powerful currents, but would use weaker ones at first.

Dr. Caldwell, of Baltimore, remarked that this is the largest nerve trunk outside of the bony cavities; hence, many cases of neuralgia are due to mechanical interferences, enlargements, tumors and other pressures. When no form of electricity will avail except to diagnose—and here the surgeon is the proper party to relieve this painful malady—it would be unscientific to continue electricity and palliatives indefinitely.—*Proc. Amer. Med. Asso.*

Hypodermic Injection of Ether in Sciatica.—I have encountered several cases of sciatica in which the usual treatment of quinine, aconite, colchicum, iodide of potassium, counter-irritation and hypodermic injections of morphia, either produced no results at all, or only temporary results. The disease would sometimes be allayed for a short time and would then manifest itself with as much or with more violence than before. The following is my experience with the hypodermic use of ether:

CASE 1. A large, robust man, aged forty-five years, had been subject to sciatica every spring. April 23, 1879, I introduced twenty minims of sulphuric ether, throwing it deeply into the tissues of the thigh, as near as possible to the seat of pain. The injection was followed by considerable pain, which in a few minutes subsided, and marked relief from the pain of the sciatica was also experienced. On the following day, finding him much better, but not entirely relieved, I repeated the injection, using thirty minims instead of twenty. On the third day he was on the street, and although his pain previous to this treatment had been excruciating, he has for many months been free from any trouble with the sciatic nerve.

CASE 2. At about the same time a neighboring doctor employed the same treatment for the relief of a male patient who had been suffering from sciatica. In this case, as in the other, pure ether was introduced without resulting inflammation or abscess.

Hereafter my practice will be to introduce twenty or thirty minims, directly over the seat of pain, or as near it as possible, and at once to apply to the part a mixture of one part of carbolic acid to two parts of glycerine. The object of this application is the prevention of possible inflammation and abscess.—DR. W. T. SPEAKER in *Chic. Med. Jour.*

Nausea of Pregnancy—Flatulent Dyspepsia.—Dr. Norwood, in a paper before the Lancaster County Medical Society, and published in the Medical and Surgical Reporter, July 10, 1880, says the following formula is very efficacious in nausea of pregnancy, as well as useful in flatulent dyspepsia, for which it was first suggested by Dr. Wood, U. S. D.

To make the prescription clear to the eye of the reader at a glance, we place it in regular form, as follows:

℞. Rad. columbo contus.,
Rad. zingiber., " aa.....℥ ss
Fol. sennæ, ...℥j
Aqua bullient., ...Oj
Infus. M.
SIG.—Take a wineglassful before each meal.

In some cases, attended with unusual acidity of stomach, we add half a drachm of carbonate of magnesia to the recipe. Constipation of the bowels nearly always exists in this sickness; but should the bowels, on the contrary, be relaxed, we omit the senna.

We are in the habit of prescribing two parcels of the recipe for the patient to take continuously, mixing one at a time, and making the addition of water referred. This quantity is sufficient in mild cases; of course it must be continued longer if necessary. There appears a ten-

dency on the part of the complaint to return in the course of three or four weeks after the conclusion of the first treatment. By then using one or two pints more of the infusion, the patient will be almost invariably cured of her sick stomach.

When the complaint is at all violent, it is better for the patient to take the morning dose, and afterward her breakfast, in bed, and not to rise until at least one hour after eating.

Patients rarely present themselves for treatment until they are very much exhausted from this sickness. They are weak, pale or sallow, emaciated, constipated, nervous, and express themselves as feeling wretched generally. In the columbo and ginger we have the tonic and stomachic so much needed, and in the senna the gentle laxative; all of which being combined, mildly stimulates to healthy action the disordered stomach, liver, kidneys and bowels. The bitter taste of the medicine, so objectionable at first to the patient, already so extremely nauseated, soon disappears upon the establishment of healthy digestion and return of natural appetite. The morbid mental condition of the patient clears up and disappears, as does the pale and sallow complexion.

We have been in the regular practice of administering this infusion to all cases of 'morning sickness' that have come under our charge during the last twelve years, numbering perhaps two hundred or more, and such has been our uniform success that we will remark, in closing, though the expression may appear extravagant, that we regard the columbo, ginger and senna infusion as much entitled to the character of a specific in the treatment of the sick stomach of pregnancy, as quinine is in the treatment of intermittent fever.

Removal of the Uterus by the Extirpation of Tumors Connected with that Organ was the title of a paper by Dr. T. Gaillard Thomas, of New York. There were three circumstances under which complete extirpation of the uterus might now be regarded as a legitimate, and often a very necessary procedure. 1. Malignant disease. 2. As an addendum to the Cæsarian section, after the method of Porro. And, 3, to render practicable the removal of tumors which took their origin in its tissues, or which arose in the ovaries, and whose attachments were too firm to be broken. It was with the third class that the present paper was concerned, which embodied the results of seven cases, in one of which the whole fundus, in another the whole body, and in five of which the entire uterus was removed. Four of the tumors demanding the operation were large, solid fibroids, with no cystic elements. One was a fibro-cyst, partly solid and partly fluid, and one a peculiar ovarian tumor which, developing between the layers of the broad ligaments, lifted the uterus entirely out of the pelvis, and made it a mere addendum to their walls. Out of the seven cases four recovered and three died. The three fatal cases were all operated on for large, solid tumors. Of the four successful ones, one was a case of solid uterine fibroid, one a case of large fibro-cyst, and two cases of ovarian cysts with large amounts of solid material in their walls. On recognizing this fact, it was to be borne in mind that a tumor susceptible of diminution of size by tapping was not so dangerous for laparotomy as one which, being entirely solid, involved the necessity of a long

abdominal incision. Dr. Gilman Kimball, of Massachusetts, has removed the uterus thirteen times (nine times for solid and four times for fibro-cystic tumors), with the excellent result of eight recoveries and five deaths. In some of his cases the whole, in others a part only, of the uterus was removed.—*Trans Amer. Med. Asso.*

Introduction of Liquids into Eustachian Tube and Middle Ear, Was the title of a paper by Dr. S. S. Jones, of Chicago. The attempts of Sir Astley Cooper, in 1800, by puncturing the membrane, and pushing air through the external meatus and Eustachian tube, and, later, of Horner, of Philadelphia, of Hinton and Allen, of London, induced the author to resort to one or the other means of introduction into the tube—that is by the nares or external ear. He has used liquids in this way for nine years, and is convinced of its advantage in dry, chronic, non-suppurative inflammation of the middle ear. Dr. Jones reverses Horner's method of procedure, and introduces liquids through the Eustachian catheter into the tube. The tube is thus more easily dilated, and will finally better admit air. He has abandoned bougies as dilators. He argues from the benefit derived by proper applications to the post-nasal cavity and pharyngeal vault a similar benefit from the local contact of fluids of proper temperature to the Eustachian tube or cavity of the middle ear. The bad influence of sea-bathing upon the middle ear has been over-estimated. As naval surgeon in the war of 1861–65, he noticed less acute inflammation of the middle ear when the temperature allowed sea-bathing on the part of the sailors, than when the thermometer was so low as to prevent it. Dr. Jones advised slightly saline tubal injections on account of their better tolerance than pure water, or weak solutions of borax, chlorate of potash, etc. Its temperature showed 60° at blood heat; no force should be used, and the quantity should be regulated by the amount of effect desired. The comfort of the patient, and the subsequent improvement in hearing operate as warrants for the continuance of the practice.—*Tr. Amer. Med. Asso.*

Phosphate of Bismuth.—M. Tedenat recommends, in Montpellier Medical, the employment of phosphate of bismuth in preference to the subnitrate. The anti-diarrhœal action of phosphate of bismuth is manifested in the same way as the subnitrate. In consequence, however, of its greater insolubility, the phosphate acts in rather weaker doses, especially in gastric affections. Notwithstanding the acidity of the gastric fluids, it is not in the slightest degree affected, which is but natural, since it resists strong acids, even in a concentrated form. The phosphate acts in somewhat smaller doses than the subnitrate, and the difference in activity is sufficiently great to create a superiority, from this point of view, in favor of the phosphate. The doses are likewise varied, according to the nature of the case. They are usually about from one to two grams. The mode of administration is absolutely identical with that of the subnitrate. With infants it suffices to place the desired quantity on the tongue, and to offer the breast or bottle. The salt is easily conveyed into the stomach, and it is possible by this means to administer large doses. Adults take this drug suspended in some liquid. In many cases some advantage is found in making it

into sweetmeats and pastilles of about one or two grams. They become disintegrated in the mouth, and the phosphate is gradually conveyed into the stomach without the patient having been able to perceive the presence of an insoluble salt in the mouth.—*Med. and Sur. Reporter.*

Successful Treatment of Imperforate Anus. — Sunday, December 1st, 1879, says Dr. Geo. W. King, in Mich. Med. News, I was called to see a child a few hours old, the midwife in attendance having discovered something wrong with it. Upon examination I found it to be a case of imperforate anus. Perineum was smooth, and without a trace of the anal aperture. The child—a male—was, with this exception, well developed and in good condition, but seemed to be suffering acutely from the intestinal obstruction. The parents insisting that an attempt must be made to relieve the child, I decided to make an exploratory incision to determine the location and condition of the rectum if present. After emptying the bladder by pressure above the pubis, I made an incision of about one inch and a-half in length in middle line, beginning a little in front of coccyx; then by a careful dissection separated the tissues to the depth of one inch, at which point the rectum was found to end in a *cul-de-sac.* The intestines being distended with meconium, I punctured the sac with a trochar, and a free discharge of its contents followed; enlarging the opening by a crucial incision, and clearing the cavity, the next step in the operation consisted in bringing down the bowel and fastening its mucous membrane to the edges of the external wound by means of sutures. This proceeding was accomplished without difficulty; the hemorrhage was free, but easily controlled by torsion and cold compress. The case progressed well, and the union has been rapid. The treatment consisted in keeping the orifice dilated with a plug of oiled cotton, and the introduction of a bougie occasionally.—*Mich. Med. News.*

Catarrh of the Bladder in Old People.—The important practical point in relation to treatment is first to ascertain the occasion of the local catarrh. In nine out of ten of these cases it consists in inability, often only to a slight extent, on the part of the patient to empty the bladder completely. The universally acknowledged cause, hypertrophy of the prostate, is, of course, the first in order of frequency. But after this are others not infrequent. Defective action may be due, first, to simple atony, the result of past habitual or occasional over-distension of the bladder with urine; secondly, to thickened and incompetent muscular paralysis of the bladder after chronic inflammation, sometimes associated with old stricture; thirdly, to defective innervation seen in connection with other slight signs of impaired function in a nervous centre, the last being, of course, the most serious of all, in its nature and probable results.

In all of these, local treatment, by carefully removing all the secretion by means of a soft catheter two or three times a day, perhaps aided by gently washing out the remainder, is the chief efficient remedy. Remember that this incompetence of the bladder is always to be sought for by physical examination; no other form of evidence in relation to it, as the patient's sensation, etc., is to be accepted as trustworthy. The introduction of a soft catheter immediately after the patient has passed

water by his natural efforts, is the only test, and it should be applied on two or three occasions before arriving at a definite conclusion. The casual relation between the group of symptoms enumerated at the outset, and the defective function described, is far more common than it is generally supposed to be. It is on this account, therefore, that I have asked your attention specially to the subject.—Sir Henry Thompson in *London Lancet.*

Medical Uses of Carbolic Acid.—The diseases in which carbolic acid is especially useful are :

1. All that class of local festering, pustulating diseases of the skin which are at once so common and so difficult to cure. They include all kinds of pustules, boils and carbuncle; sycosis, pustular, acne and festering ringworm.
2. Such strumous sores (especially of the neck) as come under the care of the physician.
3. Excoriations of the os and canal of the cervix uteri.
4. Phthisis in its second and third stages, and cases of bronchitis accompanied with more or less purulent expectoration.

In order to be effective the carbolic acid must be brought into contact with the part to be acted on, and in many cases where it has been found ineffective the failure has been due to a neglect to insure this contact. In the pustulating and suppurating diseases of the skin it is never sufficient to apply the solution of the acid, of whatever strength, upon or to the outside of the skin. It must always be introduced into the interior of the sore or pustule itself, and so as to come sufficiently in contact with every part of the diseased surface.

All cases of boils and carbuncles in their earlier stages can be absolutely aborted and cured, whilst even in later stages their further increase can be almost surely prevented. For this purpose a very strong glycerine solution should be employed, and it is best conveyed into the interior of the pustule, boil or suppurating spot by a new quill pen dipped into the solution, and introduced by a rotatory motion through its apex, where a sufficient aperture will generally be found. In carbuncles, which are necessarily larger, and have often several openings, several such introductions may be necessary, or, at a later period, threads of lint soaked in the fluid may be passed with a probe well into all the sieve-like openings. Occasionally, as when the mass is large and solid, a watery solution of the acid may be injected with a hypodermic syringe into various parts of the hardened growth. The same plan of treatment is often quite effective in cases of sycosis, pustular acne and festering ringworm.—Dr. E. P. Eade, in *Lancet.*

Wickersheimer's Preservative Fluid for Animal Substances, was the title of a paper by Dr. E. Gruening, of New York. The Prussian government, a few months ago, bought and published the following formula: To 3,000 parts of boiling water put 100 parts of alum, 25 parts of common salt, 12 parts of saltpetre, 60 parts of carb. of potash, 10 parts of arsenious acid. Cool and filter, and add to 10 parts of this solution, 4 parts of glycerine and 1 part of methlyic alcohol. In the Centralblalt f. dei med. Wissenschaften for January, 1880, Dr. Boesicke states that the formula published by the Russian govern-

ment contains two errors. He obtained a different formula directly from Wickersheimer, in which, instead of 10 parts of arsenious acid and 1 part of methylic alcohol, there should be 20 parts of the acid and 4 parts of methylic alcohol. The government formula is slightly opalescent, while that of Boersicke is perfectly clear. The first preserves the refractive media of the eye, while the second does not. A small, soft eye, which had lain three months in the government fluid, shows the same depth of anterior chamber, a clear cornea and an unchanged blue iris. The glioma retinæ, for which the eye was removed, can still be diagnosed by the naked eye. An albinotic rabbit's eye having laid in the formula the same length of time, shows the media clear, and gives the pink reflex. With the Boersicke mixture preservatton is less perfect; the lens becomes opaque in a few hours, and the cornea dim after a few days, as if it had been placed in absolute alcohol.—*Va. Med. Monthly.*

Chloral Hydrate in Acute Gastro-Enteritis of Children.—Prof. Adolphe Kjellberg finds that there is no medicine which is of so much use as chloral in checking the vomiting in acute gastro-enteritis of children. Being rapidly absorbed, it stops the vomiting, calms the patient, and often checks the diarrhœa.

It is best given by enema, so as not to risk its rejection by the irritable stomach. It should be given soon after the bowels have been moved. The dose for a child of from five to six months is twenty-five to thirty centigrams (three and a half to four grains), while to a child of from twelve to fifteen months fifty to sixty centigrams (seven to eight and a half grains), may be given. The bulk of the injection should not exceed a dessertspoonful. The enemata may be repeated two or three times daily, and the dose may be increased if it is found necessary. In order to increase the effect of the chloral the author generally adds to each enema a drop of tinct. opii. and, if stimulants be indicated, five to fifteen drops of liq. Hoffman. At the same time other remedies are not neglected—iced water or cognac or champagne for the vomiting, opium for the diarrhœa, hot mustard baths for albuminuria should it occur, stimulants for collapse, etc.—*Amer. Practitioner.*

Ether and Chloroform.—The irresistible argument, as to the merits of the two anæsthetics, is the result of later studies of statistics. From these we learn that chloroform destroys one person out of every twenty-five hundred and four.

An analysis of the cases of deaths from ether upon which these statistics are based, show that more than one-half of them are fairly attributable to other causes than the anæsthetic, and when we consider how carelessly it is often administered, these results almost justify us in considering it an absolutely safe anæsthetic.

With chloroform, on the contrary, we are fully satisfied that no amount of care or precaution, or mode of administration, or amount inhaled, will prevent, in certain cases, the fatal result. In the light of this experience, and in the face of these facts, is any physician justified in resorting to the use of chloroform in ordinary cases? That there are exceptional cases in which it is the better agent, we admit; but we hold that the physician assumes a solemn responsibility who

selects the more dangerous anæsthetic only because more convenient in some respects to give, and pleasanter for the patient to take, and thus unnecessarily subjects his patient to a risk, however small, of losing his life.—*Buffalo Med. and Surg. Journal.*

Action of Various Diuretics.—Dr. Maurel gives the result of his experiments (*Bulletin General de Therapeutique*) as follows :

1. Nitrate of potassium, uncertain as to the quantity of liquid, augments the solid material of the urine to a notable degree. The most active doses are a drachm to a drachm and a half.

2. Chlorate of potassium, less active with respect to the augmentation of solids, increases the fluids of the urine to a greater degree.

3. Acetate of potassium is uncertain, as to the quantity of both solids and fluids.

4. Iodide of potassium, far from being a diuretic, even seems to diminish the quantity of urine.

5. Salicylate of sodium, uncertain as to the quantity of liquid, increases the solid constituents of the urine.

6. Of three vegetable substances experimented upon—squill, colchicum and digitalis—the latter alone is a real diuretic. It augments at the same time the quantity of both solids and fluids. Dr. Maurel gives it as his opinion that no diuretic acts when the system is in a febrile condition ; this must be modified before diuresis can occur.—*Buffalo Med. and Surg. Journal.*

Magnet for the Removal of Particles of Steel and Iron from the Interior of the Eye.—McCuen first published a notice of removal of metallic bodies in 1874, with a magnet; but Hirschberg first actually employed a magnet for such purposes. Hirschberg's apparatus was a cylinder, the ends of which were drawn out and connected with wires that formed its positive and negative poles. The amount of magnetic polarity was, however, insufficient, and, in addition, a generating aparatus was demanded. Dr. E. Gruening, of N. Y., exhibited a magnet. His idea was to have a permanent battery. His instrument consists of an armature of six parallel cylinders, magnetized, one end of the bundle of cylinders being furnished with a tapering needle, about 22 mm. long. In his first experiments, upon pigs' eyes, Dr. G. broke all the needles. Two magnets, or "magazines," were presented, the larger being less highly magnetized than the smaller one. The latter carries the weight of two steel keys and ring, about 28 grammes. The better instrument was better made by Reynders, of New York.—*Va. Med. Monthly.*

New Operation for Prolapsus Uteri.—A radical operation of a novel character for the relief of prolapsus uteri, has been originated by Lefort, of Paris. It consists in uniting the anterior and posterior vaginal walls along their mesial lines, so as to make two vaginas instead of one. After the operation the two vaginas lie in lateral proximity like a double-barrelled shot-gun. The surfaces freshened are about half an inch wide and two inches long, and are held in position by sutures. The operation is said to be not difficult of performance, and quite successful in preventing prolapse.—*Western Lancet.*

Oophorectomy.—One hundred and thirty cases of what is commonly known as Battey's operation are on record, of which Prof. A. Hegar, of Freiburg, reports forty-two. Of these one hundred and thirty, one hundred and nine have been performed by laparotomy and twenty-one by elytrotomy. The average mortality in the total number of cases has been about twenty per cent., the cases by elytrotomy showing a per centage of recoveries slightly more favorable than those from laparotomy. Although this operation may still be regarded as sub judice, the results seem to indicate that it is of value. In certain classes of cases, notably those of hystero-epilepsy, in which the prognosis without Battey's operation would be hopeless, the operation has been followed by favorable results in a sufficient number of cases to render its performance admissible.—*Chicago Med. Review.*

Hypodermic Injections of Ergotine in Prolapsus of the Rectum.—According to M. Vidal, in *Bulletin de l'Academie de Medecine*, prolapsus of the rectum may be readily cured, and in a comparatively short time, by hypodermic injections of ergotine. By this new method, Vidal has succeeded in curing three adult cases, of which he gives the details. He used (gr. xv) one gram of Bonjean's extract of ergot or ergotine in (ʒjss) five grams of cherry laurel water. Each injection consisted of fifteen to twenty drops (exceptionally 25), which is equivalent to twenty or twenty-five centigrams of ergotine; or, in other words, to the extract of a gram and a half to three grams of ergot. None of the injections were followed by inflammation or abscess. Bonjean's ergotine causes a rather sharp, burning pain; the solution of iron is much better tolerated. In the future the author will give preference to the latter.—*Med. Journal and Examiner.*

Iodide of Potassium in Cough.—Dr. John M. Shaller, in the Cincinnati Lancet and Clinic reports a case in which the administration of iodide of potassium, in combination with morphia, for the relief of troublesome cough in a phthisical patient, produced all the symptoms of a severe coryza which were succeeded, after the third dose, by violent delirium lasting about three hours. The coryza continued for forty-eight hours, finally passing away during the continued administration of the remedy.

The amount of the iodide which caused the delirium was only about twelve grains.

For Removing Nitrate of Silver Stains, Dr. Kraetzer recommends, in *Archives de Pharmacie*, a solution of 10 parts of corrosive sublimate dissolved in 100 parts of water. This liquid is said to remove stains from the hands, linen, wool or cotton without injuring the fabric. It is said to act much more promptly than cyanide of potassium.

Hemorrhoids Treated with Capsicum.—In cases of hemorrhoidal congestion, Vidal regards capsicum annum as the best remedy. He prescribes four or five pills daily, each containing 20 centigrams, half at breakfast time and half at supper time. Under this influence the congestion and all the painful symptoms which accompany it disappear rapidly.—*Journal de Medecine.*

SCIENTIFIC ITEMS.

Wormlike Derivatives from Blood Corpuscles.—This very curious observation has recently been made by Dr. Gaule. To what this discovery may ultimately lead, it is impossible to say. Dr. Gaule gives the following directions in order to observe the phenomenon, which are easily fulfilled :

Since animals in captivity do not answer, decapitate a freshly caught, lively frog, and catch the blood in a glass stoppered bottle containing some mercury and about 5 cubic centimeters of a solution of salt (6 per cent.) The blood is now defibrinated by shaking it with the mercury, and hereupon a drop is placed upon the warm stage, the thermometer of which shows 30° to 32° C. These conditions may be varied to some extent, though with more risk of failure.

On watching this blood while warm, there appears in a blood corpuscle on the side of the nucleus, a rod-shaped body, containing some striæ, which higher lenses prove to be minute globules. This little rod is about one-half the length of the corpuscle, with tapering ends, its body showing a bluish lustre. It begins to raise itself out of the corpuscle, twists about and finally leaves it.

When once liberated, it looks, in the words of the author, more like a "little worm" than anything else. It now begins to shoot about, rushing towards other corpuscles and apparently playing with them. It is evidently "sticky" since corpuscles and other microscopic objects adhere to it.

After continuing to "play" for some minutes, these little worms finally lose their mobility and distinctness, and ultimately disappear, apparently by dissolving in the serum.

The number of corpuscles giving birth to these worms varies; under favorable circumstances nearly all participate. The corpuscles themselves undergo some changes in shape and appearance and finally disappear like their derivatives.

While admitting the puzzling and as yet inexplicable nature of the phenomenon, Gaule considers the worm "to represent the original protoplasm of the corpuscle." In this connection reference is made to an article by Prof. R. Arndt on the red corpuscles, in which that writer throws out the suggestion that the spirilæ found in the blood of relapsing fever are but derivatives of the red corpuscles. He adduces, however, merely ingenious "circumstantial evidence," but no direct proof.—*Chic. Med. Review.*

Dynamite for Stumps.—A correspondent of an English agricultural journal gives the following account of his use of dynamite for removing stumps of trees felled in a park at Mentmore, Bucks, in order to improve the landscape and leave more room for the rest of the trees to develop themselves :

The only tools required are an earth auger, which is similar to an old-fashioned wood auger, 2 inches diameter at the bit end, about 4 feet long, and fitted with a slightly hollowed shield or cap, which the man fits against his chest when boring (this is used for boring holes between the fangs), a crow-bar, a grafting and a stock axe.

Suppose a large root is to be removed out of the ground: a hole is

made with the earth auger between two of the strongest fangs; this is put in at an angle, so that the bottom of the hole is as near under the center of the root as is possible. The hole is then charged with a few cartridges of dynamite, according to the size and strength of the root; a primer cartridge, containing cap and fuse, is then inserted on the top of the charge, and the whole rammed down with loose earth by a wooden rammer. The end of the fuse is then lighted; this explodes the cap, and that in its turn the dynamite, and the whole mass is usually blown out, breaking the root into convenient pieces for loading up or burning. The fuse is cut off at convenient length so as to allow the workmen to get out of danger, which is usually from 50 to 100 yards, according to the strength of the charge.

After the charge has exploded, seldom anything remains but a large hole, much resembling the bed of a boiler. I took particular notice that no damage whatever was done to the surrounding trees. We had nearly 400 roots got out by this process, and with two of our common laboring men, with one man sent by the agents of the Dynamite Company, we have been able to remove from twenty-five to thirty per day of roots averaging from a foot and a half to four feet and a half in diameter. I find from careful calculations made that we have been enabled to remove the roots in a far more expeditious manner than hitherto, and at from 50 to 60 per cent. less cost.

No one need be prevented from using dynamite on the score of its being dangerous, for with ordinary care it is, in my opinion, as safe to use as gunpowder.—*Journal of Chemistry.*

Light and Heat.—If a piece of wood be placed in a decanter of water, and the focus of a large burning glass be thrown upon it, the wood will be completely charred, though the sides of the decanter through which the rays pass will not be cracked, nor in any way affected, nor the water perceptibly warmed. If the wood be taken out, and the rays be thrown on the water, neither the vessel nor its contents will be in the least affected; but if a piece of metal be put into the water, it soon becomes too hot to be touched, and the water will presently boil. Though pure water alone, contained in a transparent vessel, cannot be heated, yet, if by a little ink it may be made of a dark color, or the vessel itself be blackened, the effect will speedily take place.—*Young Scientist.*

Seeing by Telegraph.—We read in the Times of a novel and startling addition to telegraphic possibilities, viz., seeing by telegraph. By means of a lens, an image of the object is thrown upon a receiving plate. This is built up of a series of thermopile elements grooved anteriorly to an even surface and connected by their posterior ends with a series of wires which transmit the electric currents generated by the reception of the image to a similar series of elements in a second plate at a distance. In this second plate the electric currents create changes exactly corresponding to those produced by the image in the receiving plate.

The close analogy between this apparatus and the rods and cones of the retina and the fibres of the optic nerve is obvious.—*Brit. Medical Journal.*

PRACTICAL NOTES AND FORMULÆ.

Salicylate of Potash.—Salicylate of potash is recommended for rheumatism by Dr. Donnelly in the N. Y. Medical Record. His prescription is as follows :

℞ Acid salicylic..... ʒ iij
Potass. bicarbon..... ʒ vi
Aquæ..... ʒ ij

Dose, a teaspoonful every three hours.

He says : The rapidity of action of this combination is remarkable. Its absorption seems to be immediate; the patient will speak of the speedy relief he experiences; the blood is restored to its natural alkalinity, as seen by the diminished acidity of the perspiration and urine; the brick-dust sediment in the latter disappears, the pain and swelling soon subside, and the metastic character of the disease is lost.

Remedies for Asthma.—

℞ Iodide of potassium..... ʒj
Tinct. of bloodroot..... ½ ounce.
Brown mixture..... 3½ ounces.

Mix. Dose, tablespoonful three times a day.

Or :

℞ Tinc. of lobelia..... 2 drachms.
Syrup of squills..... ½ ounce.
Syrup of wild cherry..... ½ ounce.
Brown mixture..... 3 ounces.

Mix. Dose, tablespoonful often enough to slightly nauseate whenever asthma is threatened.

Or :

℞ Tinc. of assafœtida..... 3 drachms.
Tinc. of lobelia..... 1 drachm.
Tinc. of gelseminum..... 1 drachm.

Mix. Dose, forty drops, repeated in two hours if needed, then thirty drops three times a day until a suspension of the remedy is indicated.—*Chicago Med. Times.*

Tonic Wine.—We find the following in the London Chemist and Druggist :

℞ Ext. carnis..... 1 oz.
Ferri citras..... 96 grains.
Sherry wine..... 16 oz.
Syr. aurantii..... 2 oz.
Aq. flor. aurantii, q. s. ad 24 oz.

Dissolve the extract in 4 oz. of aqua flor. aurant.; add the other ingredients, and filter.—*Boston Journal of Chemistry.*

The Diagnosis of Rotheln.—W. Gilchrist Burnie, M. R. C. S., states, in the British Medical Journal, June 5, 1880, that a diagnosis of rotheln may be made from measles, by observing the following points: 1. The rash is more vivid and in smaller patches, the patches not being markedly crescentric. 2. There is no coryza nor cough. 3. There are sore throat and strawberry tongue. From scarlet fever the points of diagnosis are these: 1. The rash is in patches and less red. 2. Neither tonsils nor cervical glands are much affected. 3. The temperature rarely exceeds 102° Fahr. 4. The illness is of short duration (rarely lasting a week) and mild. 5. The patient does not affect others with scarlet fever and albumen is absent from the urine. Desquamation occurs about the fiftn or sixth day, and it is sometimes profuse. In conclusion, I would say that I cannot but think it would be a great benefit to medicine if rotheln were, once and for all, recognized as quite a distinct disease.—*Med. and Sur. Rep.*

Nervous Dyspepsia.—Dr. Myers writes to the Virginia Medical Monthly: I cannot speak too highly of the following preparation which I have employed, with the happiest results, in those cases of nervous dyspepsia the result of cerebral hyperemia.

℞ **Bromid. sodium** ..... ℥j.
Ext. ergot, fluid. (Tilden's) ..... ℥ij.
Pepsin (saccharated)
Pulv. carbo lignis ..... aa ℥iij.
Aqua ..... ℥ij.

M. fiat mistura. Dose, a teaspoonful every three or four hours.

It contracts the cerebral vessels to their ordinary size, thereby relieving gastric derangement, etc. If constipation exists, I employ, as a purgative, the combination of ox gall and ext. aloes aa grs. xv., podophyllin, grs. ij, made into five pills, of which one is given every night, or every other night, as the case may require.—*Cin. Med. News.*

Rheumatism.—A writer in Journal of Materia Medica recommends the following for rheumatism:

℞ **Fl. ext. manaca** ..... ℥ij
Elixir simplisis, ad ..... ℥ij

Dose, a teaspoonful three times daily.

As an adjuvant I prescribe a very stimulating liniment to be rubbed on the affected part for half an hour three times daily. This constitutes my treatment. I have had fifty cases under my care and have not failed to cure one.

Ergot in Pharyngitis.—In chronic pharyngitis, where the blood vessels of the pharynx are enlarged and tortuous and the secretion moderate, the following is recommended:

℞ **Ergotin** ..... gr. xx
Tinc. iodine ..... fl. ℥j
Glycerin ..... fl. ℥j M

Sig. Apply to the pharynx freely twice daily with a camel's-hair brush.—*Ohio Med. Reporter.*

Thymic Acid Mixture for Diphtheria.—I have, for the last few years, been using the following medicine in all of my cases of diphtheria and diphtheritic sore throats, with a success that I never obtained with any other form of medication. I have used it in those cases where heretofore I have failed and lost my patients with the usual remedies, such as tincture of iron, quinine, etc., generally in use for this distressing disease:

℞. Glycerine.....ʒ ij
Thymic acid.....gr. iv to vj
Chlorate of potash.....ʒ iiss
Bi-sulph. quinine.....ʒ ss to ʒ j
Brandy (very old).....ʒ vj M.

Sig: To a child from 2 years up to 5, a teaspoonful every hour or two, according to the urgency of the disease. Increase the dose from this age upwards to ʒiv. Let the patient take it without any water if possible, as by so doing he will get the stimulating effect on the throat, and thus avoid the use of anything for a gargle.

For atomizing the throat, I use the following formula:

℞. Glycerine.....ʒ j
Thymic acid.....gr. vi to x.
Borate of soda.....ʒ iv
Camphor water.....ʒ ij
Tar water.....ʒ v M. Filter.

Dr. Warren in Va. Med. Jour.

Formula in Gonorrhœa.—Dr. Herbert L. Snow publishes, in the British Medical Journal, April 17, 1880, the following formula, which in his hands has proved of great service, and which is not particularly unpalatable:

℞. Ol. copaibæ
Ol. cubebæ.....aa ʒ ij
Liquor potassæ.....ʒ iiiss
Tinct. aurantii.....ʒ iij
Syrupi simplicis.....ʒ ij
Aq. menth. pip., q. s. ad.....ʒ viij M.

Sig.—Two tablespoonfuls three times daily.

As an injection, he regards the liquor potassæ permanganatis (ʒiij ad aquæ ʒvj) as by far the best injection, and it has the great advantage of being serviceable all through the acute stage of gonorrhœa. It should be used very frequently; and subsequently, a little zinc sulphate may be added, with benefit.—*N. Y. Med. Rec.*

Anodyne Mixture.—

℞ Brom. potass..... ʒ ij
Hoffman anodyne..... ʒ j
Camph. water..... ʒ ijss M

Dose, one tablespoonful.
Excellent in hysterical and nervous conditions.

In Dyspeptic Constipation, and especially where the person has suffered fron malarial poisoning, I have used the following with the most gratifying results:

℞. Ext. berberis aquifol. fluidi.
" cascaræ sagradæ " .... aa ℥j
" œnothera biennis fl.....℥jss
Syr. sennæ comp.....℥iijss

M. Sig.—A teaspoonful three or four times a day, according to effect on the bowels. The syrup sennæ should be hot when mixed with the extracts.

A very obstinate case of eczema capitis yielded to the following:

℞. Ext. berberis aq. fl.....℥ss
Syr. rhei ar.....℥ij

M. Sig.—A teaspoonful ter in die.

Locally,
℞. Goa powder.....grs. xv
Vaseline.....℥ss

M. Apply morning and evening, washing off with solution of borax once daily. The patient, æt. 10 months, presented the worst case of the disease I ever saw. It was entirely well in less than three weeks.

Eucalyptus Globulus.—I have used in many cases of bronchial catarrh, as well as in malarial fevers, with the happiest results. I have treated a number of cases of malarial fever, with typhoid symptoms, with eucalyptus alone, without losing a patient.—*Theraputic Gaezette.*

Treatment of Poisoning by Rhus Toxicodendron.—Dr. H. L. Judd, of Illinois, writes: My treatment, for a number of years, for poisoning by rhus toxicodendron, and which has been very satisfactory, is as follows:

Give quinine internally from grs. xv to grs. xxx for twenty-four hours, according to amount of constitutional disturbance and extent of eruption.

Use as a local application, spread on thin pieces of cloth:

℞. Ung. zinci oxide.....℥ij
Liq. plumbi sub.....℥ij
Sig.—Apply twice daily.

The application of the above ointment is very grateful to patients, and allays the irritation and consequent burning sensation better than any remedy that I have used. It requires about two days to effect a cure.

Lactopeptine in Cholera Infantum.—In a case of extreme emaciation resulting from cholera infantum, in which all other remedies had failed, and death seemed inevitable, the child rapidly recovered under the following treatment:

℞. Lactopeptine.....gr. v
Valentine meat juice.....℥j M
Sig.—Give four times a day.

In addition to this a little milk pap was occasionally allowed, to which also the lactopeptine was added.

EDITORIAL AND MISCELLANEOUS.

Receipts will appear in our next.

☞Subscribers who have not done so will please send up their dues.

College Notices.—Read the advertisement of the Medical College at New Orleans in the present issue.

☞See advertisement of *Southern Midical College*, Atlanta, Ga. In writing to this Institution address Dr. R. C. Word, Dean, as there are three schools in the city, and mistakes are frequently made.

Three Terms.—The American Medical College Association have adopted the three terms requirement to take effect at the session of 1882. And most if not all the schools, it is supposed, will adopt the measure.

RESIGNATIONS AND CHANGES.

Dr. Lindsay Johnson has resigned his place as Demonstrator of Anatomy and Lecturer on Minor Surgery in the Southern Medical College.

Dr. James A. Gray resigned his position in the Atlanta Medical College (the old school) and has been appointed Demonstrator of Anatomy and Auxiliary Professor of the "Principles and Practice of Surgery" in the Southern Medical College (the new school). Dr. Gray is able and well qualified for the duties assigned him.

Dr. John Thad. Johnson resigned his professorship in the old school and has accepted the Chair of the "Principles and Practice of Surgery" in the Southern Medical College, Atlanta. Dr. Johnson was for many years Dean of the Faculty and Prof. of Anatomy in the other school. He is an able l cturer and eminently fitted for the Chair which he has chosen in the new school.

Dr. G. G. Crawford will continue as heretofore in the chair of "Operative and Clinical Surgery." He is a fine operator.

Dr. G. G. Roy has been elected to the Chair of "Materia Medica" in place of Dr. G. M. McDowell, resigned. He is competent and will devote himself with zeal and energy to the position assigned him.

OUR JOURNAL.

The present number of our Journal will visit many medical men not subscribers. We respectfully ask them to consider the claims of this Journal to their support. For ten years the editors have labored hard and expended much to establish a practical and useful Medical Journal in the interest of the profession, and as the organ of the busy practitioners throughout the country. The size and plan of the JOURNAL are such as experience has shown to be the best for the majority of medical men, furnishing in a compact form the largest possible amount of information for the least possible amount of cost. We have secured a large list of subscribers, and have received from them abundant evidence of approval as to the conduct and practical usefulness of our Journal. Yet there are thousands of medical men who do not take a Journal, and who seem to feel no interest in developing the medical literature of their section, or in keeping pace with the progress of their profession. There are du-

ties which we owe to ourselves as true and conscientious men, and to our patrons, who have a right to expect the practitioner to know and to give them the benefit of the latest and best that is known to the profession.

Every true and honorable physician must see and acknowledge the truth of what we have said on this point. Every practitioner should take and read at least one good Medical Journal; and if only one, let that be one in his own section, as duty begins at home. And he should not only take it, but contribute as far as he may be able to its pages any useful and practical information which may be discovered or developed in his experience as a practitioner.

Without further argument upon what must be manifest to every reflecting and intelligent practitioner touching his duty in this matter, we kindly and earnestly appeal to every one who reads this article to subscribe for our Journal, and unite with us in our efforts to sustain a useful and good enterprise, to benefit the profession and to push forward the car of medical progress in our section. Send on your names for 6 or 12 months, payable on reception of the first number. The volume begins with January number, but may commence at any time. See club rates, terms, &c. on title page of JOURNAL.

BOOK NOTICES.

HOMEOPATHY—WHAT IS IT? A statement and review of its doctrines and practice by A. B. Palmer, M.D., Prof. of Pathology and Practice of Medicine and Sugery in the University of Michigan, etc.: Detroit, Geo. S. Davis, Medical Publisher.

A work of 104 octavo pages, neatly gotten up.

"The work as now presented, says the author, is the result of a careful and candid examination of the essential doctrines of Homeopathy as taught by its founder and authortative expounders, and is a condensed statement of these doctrines. A great many practitioners throughout the country doubtless desire correct information on this subject, and will gladly welcome Dr. Palmer's timely and valuable book.

HEALTH AND HEALTHY HOMES: A Guide to Domestic Hygiene, by Geo. Wilson, M. A. M. D., Medical Officer of Health for Mid-Warwickshire sanitary district and Author of Handbook of Hygiene and Sanitary Science (fourth edition), with notes and additions by J. G. Richardson, M. D., Professor of Hygiene in the University of Pennsylvania, etc., etc. Philadelphia, Pressley Blakiston, 1012 Walnut St., 1880.

This is a neatly gotten up book of 314 pages. The work is instructive and interesting, and treats of a subject too little understood and too much neglected. It will well repay perusal.

PATHOGENETIC OUTLINES OF HOMEOPATHIC DRUGS, by Dr. Med. Carl Hemegke, of Leipzig. Translated from the German by Emil Tietze, M. D., of Philadelphia. Boericke & Tafel, New York, 145 Grant St. Philadelphia, 635 Arch St., 1880.

A work of 375 pages octavo, neatly printed. It is well for the regular physician to be posted upon all subjects. It is due to the Homeopathist to give him a fair hearing and to examine his theory as proclaimed by himself in his standard works. The author in the work before us proposes to give us the "essential outlines of the homeopathic method of cure, in order to meet various erroneous opinions regarding homeopathy, which are promulgated both among physicians and laymen." A repertory is added "presenting to the reader a group of remedies standing in specific relation to certain organs and tissue-systems, and to direct the attention to the comparison of the characteristic features of a definite category of drugs," &c.

A TREATISE ON FOREIGN BODIES IN SURGICAL PRACTICE, by Alfred Poulet, M. D., Ajt. Surg-Maj., Inspector of the School for Medicine at Val-DeGrace. Vol. II., pp. 320. New York, Wm. Wood & Co., 27 Great Jones St.

This is the second volume of a work previously noticed, and is exceedingly useful and practical, treating of foreign bodies in the air passages —the urinary passages, male and female; in the uterus, in the ear, in the nose, etc.

A HAND-BOOK OF PHYSICAL DIAGNOSIS: Comprising the Throat, Thorax and Abdomen, by Dr. Paul Guttman, Private Docent in Medicine, University of Berlin. Translated from the third German Edition by Alexander Napier, M.D., Fel. Fac. Phys. and Surg., Gasgow: with a Colored Plate and Eighty-nine Fine Wood Engravings. New York, Wm. Wood & Co., 27 Great Jones St., 1880.

A valuable, interesting and instructive work of 335 octavo pages, upon a department little understood by the large majority of general practitioners, as it "presents a concise description of the various methods pursued in the chemical examinations of the thoracic and abdominal organs in health and disease, and an estimate of the diagnostic value of the results so obtained. The examination of the larynx is treated of in an apendix."

ELEMENTARY PRINCIPLES OF SCIENTIFIC AGRICULTURE, by N. L. Lupton, L.L.D., Prof. of Chemistry in Vanderbilt University, Nashville, Tenn. New York, D. Appleton & Co., 1, 3 & 5, Bond St., 1880.

This is an instructive and interesting work, imparting useful information in the improvement of soils, scientific agriculture, &c. It will well repay perusal.

INTERESTING EXERCISES IN QUALITATIVE ANALYSES: for Ordinary Schools, by Geo. W. Rains, M.D., Prof. Chemistry and Pharmacy in the Medical Department of the University of Georgia, and Instructor of Natural Science in the Richmond Academy, Augusta. New York, D. Appleton & Co., 1880.

"This work," the author remarks, "is designed to impart interest to the study of chemistry, &c., and will be found serviceable to medical students, druggists and physicians, enabling them, in many cases, by a speedy and simple process, to determine those salts and medicines which may have lost their labels. It is just the book for young amateurs."

THE POPULAR SCIENCE MONTHLY: Conducted by E. L. & W. J. Youmans. $5 per annum; 50 cents per number. Volumes begin May and November each year. Subscriptions may begin at any time. D. Appleton & Co., New York.

Contains instructive and interesting articles and abstracts of articles, original, selected, and illustrated, from the pens of the leading scientific men of different countries; accounts of important scientific discoveries; the application of science to the practical arts; the latest views put forth concerning natural phenomena, by savants of the highest authority.

PRACTITIONERS' REFERENCE BOOK: by Richard J. Dunglison, A. M. M. D., Editor Dunglison's Medical Dictionary, Secretary of the American Academy of Medicine, etc. Second edition, revised and enlarged. Philadelphia, Lindsay & Blakiston, 1880.

The edition of this very useful work here presented is much enlarged and improved, containing 475 ovtavo pages. As a work of reference and ready information upon a thousand items which a doctor needs to know, it is exceedingly reliable, and should be in the library of every physician.

LUCIE CODEY: A Novel, by Henry Greville, Author of "Dosia," "Marrying Off a Daughter," Savili's Expectation," etc. Translated by Mary Neal Sherwood. Philadelphia, T. B. Peterson &. Bros. Price 50 cents.

The above has been kindly sent us by the publishers for review. We are glad to receive books of any kind, but a medical journal cannot usually devote space for a review to other than medical and scientific works. We will, however, give title page and, perhaps, brief notice to any work sent to our office. Peterson & Bros. are extensive dealers in books, including novels, poems and standard works of the best authors.

THE MANAGEMENT OF CHILDREN IN SICKNESS AND IN HEALTH: A Book for Mothers, by Annie M. Hale. M.D. Philadelphia, Pressley Blakiston, 1012 Walnut St., 1880.

A practical and useful little work, containing many useful hints to mothers, who would do well to purchase the book and use as a guide in the management of babies, instead of following the thousand foolish suggestions of quacks and superstitious old women.

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY: Vol. 4 for the year 1879. Boston, Hougton, Mifflen & Co., 1880.

A large octavo volume of 500 pages, containing a number of able and interesting papers read before the Society at its fourth annual session at Baltimore, Sept 17, 1879.

SPECIAL NOTICES.

WM. R. WARNER & Co.—We desire to call the attention of our readers to the advertisement of this house. It is one of the most reliable houses in the United States, and all the preparations which they advertise can be depended upon to be as represented. We have used their medicines ourselves, and have never been disappointed.

It is becoming more and more necessary to make remedies as little repulsive to patients as possible, and therefore those elegant preparations, as are many of the elixirs, syrups, and sugar-coated pills, are becoming popular among physicians; but a frequent drawback is the unreliability of the preparations of many manufactories. This objection, however, we know, does not hold in regard to those of Warner & Co.—*Cincinnati Medical News.*

We would call attention to the advertisement, on page 9, of **Messrs. HENRY THAYER & CO.**

This is an old and honorable house, having been established in their branch of Pharmaceutical Chemistry over thirty years.

All of their preparations are faithfully made of full strength, elegant in appearance, and have deservedly won a wide reputation. Physicians and druggists may depend upon the correctness and accuracy of any preparation bearng their label.

Their list of new Fluid Extracts is extensive, and the genuineness of indigenous raw material is certified at the Botanical Gardens of Harvard University.

THE NAME **PAR E, DAVIS & CO.** on the label of a package has become a guarantee to the physicians of this country, of honesty in the manufacture of the preparation. The firm is reaping the fruits which such a reputation naturally brings, and stands to-day second to no firm of pharmacists in this country in the extent of its business.

The Profession has, moreover, been placed under obligations to it for the great majority of the valuable New Remedies which have during the past few years been added to the materia medica. Inasmuch as it makes a specialty of New Remedies, physicians will do well in testing these to secure PARKE, DAVIS & Co's preparations of them before passing judgment on their merits.

The later additions which Parke, Davis & Co. have introduced are **Jamaica Dog Wood,** a substitute for opium; **Manaca,** the Brazilian antirheumatic remedy; and **Ergotæ Purificatus,** a constant preparation of ergot and one peculiarly adapted for hypodermic administration.

EXTRACT OF A LETTER FROM DR. HUNTER MCGUIRE.

Richmond, Va., April 1880. * * * * * In a host of diseases where a powerful tonic and alterative is wanted, the BEDFORD ALUM AND IRON MASS AND WATER is of inestimable value. HUNTER MCGUIRE.